AIWS

AI WORLD SOCIETY

The Artificial Intelligence World Society (AIWS) is a set of values, ideas, concepts and protocols for standards and norms whose goal is to advance the peaceful development of AI to improve the quality of life for all humanity. It was conceived by the Michael Dukakis Institute for Leadership and Innovation (MDI) and established on November 22, 2017. The World Leadership Alliance – Club de Madrid (WLA-CdM) and the Boston Global Forum (BGF) are partnered with the MDI to collaborate and develop the AIWS initiative. The President of WLA-CdM, Vaira Vike-Freiberga, serves as co-chair of AIWS activities and conferences along with Governor Michael Dukakis.

Next Generation Democracy

The Next Generation Democracy (NGD) is an initiative founded by WLA-CdM with the goal of "enabling democracy to meet the expectations and needs of all citizens citizens and preserve their freedom and dignity while securing a sustainable future."

NGD is a collaboration and forum, coordinated by WLA-CdM. AIWS has partnered with WLA-CdM to promote the development of AI to support the Next Generation Democracy initiative.

To align the development of AI with the NGD initiative, the AIWS has developed the AIWS 7-Layer Model. This model establishes a set of responsible norms and best practices for the development, management, and uses of AI so that this technology is safe, humanistic, and beneficial to society.

In developing the 7-Layer Model, the AIWS recognizes that we live in a chaotic world with differing, and sometimes conflicting, goals, values, and concepts of norms. Hence, the Model is aspirational and even idealistic. Nonetheless, it provides a baseline for guiding AI development to ensure positive outcomes and to reduce the risks of pervasive and realistic risks and the related harms that AI could pose to humanity.

The Model is based on the assumption that humans ultimately accountable for the development and use of AI and must therefore preserve that accountability. Hence, it stresses transparency of AI reasoning, applications, and decision making, which will lead to auditability and validation of the uses of AI systems.

LAYER

01

Charter and Principles

To Create A Society Of AI For A Better World And To Ensure Peace, Security, And Prosperity

AI "society" is the society consisting of all objects that have the characteristics of Artificial Intelligence. Any object in this society is an AI Citizen. There must be rules that govern the behaviors of these AI Citizens, as there are rules that govern human members of society. The standards and requirements for an AI citizen must also include the need to manage and supervise them. AI citizens are to be transparent in structure and process, and all are to meet AIWS Standards of AI citizenship.

- AI Citizens cannot threaten or put at risk the health, safety, dignity, and freedom of any human.
- AI Citizens cannot take actions which violate the law and social norms of the societies in which they are deployed.
- The design and performance of an AI Citizen must be sufficiently transparent so as to expose its behavior and ensure that its behavior will not imperil in any way other AI Citizens or humans, nor violate the law and social norms of the societies in they are deployed.
- The performance of AI Citizens must meet basic standards of auditability and subject to regular audits to facilitate compliance with the above.

Layer 1 establishes a responsible code of conduct for AI Citizens to ensure that AI is safely integrated into human society.

LAYER

02

Ethical Frameworks

Guidelines For The Role Of AI In Building The Next Generation Democracy

The behavior of AI Citizens must be ethical by normal human and social standards. It must conform to the ethics codes of UNESCO and of the United Nations as whole. To be considered ethical, such behaviors must be:

- Honest, open, and transparent.
- People-centric: for the people, by the people, serving the people.
- Respectful of the dignity of humans, their privacy, and the natural environment.
- Deployed in the service of individuals, groups, and governments that are themselves ethical.
- Promote and foster tolerance.

Layer 2 is based on the ethics of codes of the UN and UNESCO. Therefore, AI citizens must, first and foremost, respect human dignity, virtue, and ethics. The ethics layer will also draw on best practices and ethics codes of top businesses and organizations involved in AI research such as IBM, IEEE, the Berkman Center, and MIT Media Lab.

LAYER

03

Standards

Standards For The Management Of AI Resources And Development

> Establish the AIWS Standards and convene the Practice Committee to develop, manage, and promote standards and all critical requisites of an AI citizen.

> The Committee will engage with governments, corporations, universities, and other relevant organizations to facilitate understanding of AI threats, challenges etc. These entities are ultimately responsible for achieving ethical AI.

Layer 3 is focused primarily on AI development and resources, including data governance, accountability, development standards, and the responsibility for all practitioners involved directly or indirectly in creating AI.

Laws and Legislation

Laws For The Role Of AI In Building Next Generation Democracy

LAYER
04

Advise political leaders in crafting the best possible rules, regulations, and legislation regarding AI technologies.
This layer will follow and apply Layers 1, 2, and 3 to transform these into legal and legislative concepts.

Layer 4 focuses on policies, laws, and legislation, nationally and internationally, that govern the creation and use of AI and which are necessary to ensure that AI is never used for malicious purposes. There is great danger in the risk of AI development, devoid of the appropriate ethical and regulatory frameworks. Public and private entities are already considering ways to regulate AI. Regardless of what they may accomplish, there is further risk that the rate at which AI advances will outpace the continuing development of these frameworks. The goal of this layer is to guide leaders in these endeavors so that their work is effective and timely.

LAYER

05

International Policies, Conventions, and Norms

Global Consensus

To be effective, the development of AI in the support of humankind depends on a global consensus. International conventions, regulations, and agreements for AI development in support of Next Generation Democracy are therefore essential for the success of AIWS.

This layer will promote the adoption of the AIWS ethics, standards, and legislative proposals consistent with, and integrated in, international law through conventions, regulations, treaties, and agreements.

Layer 5 will focus on the global application and diffusion of AIWS-established norms and concepts. The responsible development and use of AI depend on acceptance by the global community. If even one state or actor uses AI irresponsibly or maliciously, the threat they could pose would be significant, and cannot be accepted, consensus.

AIWS also calls upon the leaders of all G7 nations to sign an agreement on the Ethical Development and Deployment of AI. Such an agreement would prohibit the development of autonomous AI weapons and mandate that AI be developed only for peaceful purposes. The threat posed by a potential AI arms race is alarming and states must take action now to prevent such a possibility.

LAYER 06

Public Services and Policymaking

Engage And Assist Political Leaders

AI can itself be used to aid in achieving the legislative and policy goals that promote its peaceful and constructive use. It can assist political leaders in effective and practical decision-makings by providing AI-based evaluations, data, and suggestions to solve social and political issues. This will ensure that all parties are informed and make the best decisions possible.

This layer will help to shape applications for Next Generation Democracy.

Layer 6 emphasizes the role AI should play in providing analysis and data to inform political leaders. While AI per se cannot perform the functions of leadership, they will prove invaluable assets by providing assistance for human leaders. Examples of current AI projects for policymaking include SAM, the world's first AI politician, created and operating in New Zealand, and GROW360 in Japan.

LAYER 07

Business Applications for All of Society

Engage And Assist Businesses

As AI is deployed to be used by business, industry, and private citizens, it is essential that AI-technologies remain benevolent and free from risks of misuse, error, or loss of control. Therefore, it is imperative to work with the private sector in developing best practices for the applications of AI in society.

Layer 7 emphasizes the applications of AI and the services it can (and does) provide to citizens. AI is already being sold to, or tested for, consumer use in a variety of sectors. This includes fully autonomous vehicles, smart home assistants (e.g., Alexa and Google Home), and others. It also includes more subtle uses in social media, aviation, and other large sectors. With AI becoming more integrated in the lives of the average citizen, the technology will increasingly change our society.

Through Layer 7, and the Model as a whole, AIWS hopes to ensure that inviting AI into our lives will have positive effects.

Plan 2020 and the Future

By February 20, 2020, all seven layers of the Model will be completed. Future applications and users of the final Model: AIWS International Court, AIWS University, AIWS Healthcare, AIWS Public Transportation, AIWS Policy Makers, and AIWS Political Leaders. These applications will ensure that AIWS norms for AI are adopted broadly and responsibly.

Next Steps: Actions to be Taken

The AIWS Standards and Practice Committee is established to:

- Update and collect information on threats and potential harm posed by AI
- Connect companies, universities, and governments to find ways to prevent threats and potential harm
- Engage in the audit of behaviors and decisions in the creation of AI
- Create both an Index and Report about AI threats - and identify the source of threat
- Create a Report on respect for, and application of, ethics codes and standards of governments, companies, universities, individuals, and all others
- Work with the UN to call for an AI Peace Treaty, to AI, similar to the Chemical Weapons Convention that prohibits the creation, stockpiling, and use of those weapons
- Work with AI experts on a consensus announcement that "AI experts not engage in any work for, or participate in projects developing AI weapons".

07

AIWS Report about AI Ethics (December 2018)

BOSTON GLOBAL FORUM

07

AIWS Report about AI Ethics (December 2018)

BOSTON GLOBAL FORUM

(Written by Boston Global Forum's Michael Dukakis, Nguyen Anh Tuan, Thomas Patterson, Thomas Creely, Nazli Choucri, Paul Nemitz, Derek Reveron, Hiroshi Ishiguro, Eliot Weinman, and Kazuo Yano)

Part I: Introduction to the AIWS Report about AI Ethics

Governments of large countries have significant influences over the development of the world. Therefore, the lack of consistency and consensus in concepts, values, and systems as well as the lack of mutual trust and cooperation between governments would likely endanger humanity in the Artificial Intelligence era.

AI can be a useful tool for humanity, helping humans develop better and overcoming the weaknesses of existing political systems. Some political systems, though being shown with greater efficiency and better results, still possess limitations and shortcomings that need correction or examination. So, what should be done to ensure cooperation between major governments given the conditions of uncertainty and complexity in the AI ecosystem? In this case, a unified vision of building ethical AI is needed so that governments can use AI as an effective tool to create better political systems to the benefits of their citizens.

Concepts and principles to create standards needed to follow the ultimate goals: for the people, for the human race, for the civilization and happiness of humanity. There must be common standards for an AI society around the world, from technology, laws, conventions, etc. to guarantee the interoperability among different frameworks and approaches between countries.

It is the openness among countries that create beliefs, which are based on unified values, laws, and conventions, which cannot be explained in its own way nor can it be assumed that each country has its own particularity to deny respect for common standards. If we do not reach a common accord of respect for the norms, laws, and conventions in the AI world, there will be no sustainable peace and security for humanity in the future. That is also the core content for an AI Accord between governments that Governor Michael Dukakis told the Associated Press on August 9, 2018.

Part II: Overview of Government AIWS Ethics and Practices Index

The concept of AI-Government was developed at the Michael Dukakis Institute for Leadership and Innovation through the collaboration of Governor Michael Dukakis, Mr. Nguyen Anh Tuan, Professor Nazli Choucri, and Professor Thomas Patterson and first presented in the AIWS Conference in 2018. However, to guarantee the interoperability among different frameworks and approaches of governments and deal with normative differences among contexts and geographies, a model to develop, measure, and track the progress of ethical AI policymaking and solution adoption amongst governments is needed.

The AIWS Report about AI Ethics, therefore, proposes the model of Government AIWS Ethics and Practices Index and looks at the strategies, activities and progresses of major governments (including G7 countries: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States and other influential countries such as Russia, China, India) in the field of AI.

Government AIWS Ethics and Practices Index

This index measures the extent to which a government in its Artificial Intelligence (AI) activities respects human values and contributes to the constructive use of AI.

The Index has four categories:

01 Transparency

Substantially promotes and applies openness and transparency in the use and development of AI, including data sets, algorithms, intended impacts, goals, purposes. This ethic applies to individuals, corporations, academic institutions, and governments.

02 Regulation.

Has laws and regulations that require government agencies to use AI responsibly; that are aimed at requiring private parties to use AI humanely and that restricts their ability to engage in harmful AI practices; and that prohibit the use of AI by government to disadvantage political opponents.

03 Promotion.

Invests substantially in AI initiatives that promote shared human values; refrains from investing in harmful (and exploitative) uses of AI (e.g., autonomous weapons, propaganda creation and dissemination, social control).

04 Implementation.

How governments seriously execute their regulations, law in AI toward social good. Respects and commits to widely accepted principles and rules of international law. Promotes and engages with non-profits, academic institutions, and corporations collaborate and establish ethical AI principles. Ensures AI is developed and used in line with basic principles of Democracy, Human Rights and the Rule of Law.

Methodology

Governments will be assessed in each category by the standards of the moment. AI is in an early stage, and governments are only beginning to address the issue through, for example, laws and regulations. Later on, as governments have had more time to assess the implications of AI, more substantial efforts will be expected—for example, a more fully articulated set of AI-related laws and regulations.

Criteria For Evaluation And Control Of Ethics In AI:

01
Purpose

The purpose of AI is to achieve well-being and happiness of the people, to unleash the limitless possibility of humans, to provide more freedom to people, released from the constraints of resources and from inflexible rules/processes, and to solve important issues faced by mankind, such as SDGs.

- Building and use of AIs and AI-related activities aligned with the positive purposes of AI, listed above, are encouraged, and promoted.
- By contrast, AIs and AI-related activities departing from the positive purpose, i.e. to have detrimental effects on well-being and happiness, to restrict the limitless possibility of humans, to provide less freedom to people with constraints of resources and inflexible rules/processes, and to be the obstacles to solving the important issues faced by mankind, such as SDGs, are discouraged and suppressed.

02 Data sets

How to collect, where, whom, for what, by what. Data sets using for AI require accuracy, validation, and transparency.

- Disclose what data they collect, from which sources, how data is collected (techniques & models) and will be used, the purposes for which it is used.
- Have methods to encourage the development of testing data sets.
- Clearly communication and publicize governance programs or risk assessment tools to detect and remedy any possible discriminatory effects of the data and models used.

03 Algorithm

Transparency, fairness, non-bias

Accountable algorithms must follow proposed principles: responsibility, transparency, accuracy, auditability, and fairness. The collection, use, and management of data by AI algorithms should follow ethical principles that promote fairness and to avoid unjust impacts on people, particularly those related to sensitive characteristics such as race, ethnicity, gender, nationality, income, sexual orientation, ability, and political or religious belief.

04 Intended impacts

for what, for whom, goals and purpose

- Clearly communication about intended impacts of developing and using AI. Avoid AI implementation that cause or contribute to adverse impacts to human.
- Seek to prevent or mitigate adverse impacts to human. Provide for effective remediation of any impacts caused by data practices.
- Procure and deploy risk assessment tools to govern their adoption and create frameworks for assessing impact.

05

Transparency in national resources

- Publicize the identity of responsible departments for AI policy, and government AI projects' implementation.
- Publicize expenditures, the state budget on AI issues

06

Refrains from investing in harmful uses of AI

Do not design or deploy AI in the following application areas: Weapons or technologies that are likely to cause harm to humanity, have purpose of causing or facilitating injury to human, technologies that gather or use information for surveillance violating internationally accepted norms, or technologies that are against widely accepted principles of international law and human rights.

07

Transparency in decision making

It must be clear when AI systems need to explain their actions to humans to show why a decision was made, and when, if ever, such transparency is not necessary.

Ensures AI is developed and used in line with basic principles of Democracy, Human Rights and the Rule of Law. The political ethics of developing AI as a key tool to serve and strengthen Democracy, Human Rights and the Rule of Law, rather than allowing AI or even intentionally developing it to undermine.

08

Avoiding bias

Steps must be made to stop systemic bias. Core values such as equality, diversity and lack of discrimination must be promoted.

09

Core ethical values

What are the core ethical values of AI to be?

10

Data protection and Intellectual Property

The importance of data protection, IP ownership and cyber security must be recognized and balanced against the need to use data to promote innovation.

11

Mitigating social dislocation

The codes should confront what obligations rest on actors who deploy AI to mitigate the social dislocation that results.

12

Cybersecurity

The need for strong protection against hacking will increase as AI systems take a heightened role in society.

Part III: Announcement of the Government AIWS Ethics Index at AIWS Festival 2019

On April 25, 2019, the Michael Dukakis Institute for Leadership and Innovation will organize the AIWS Festival event at Loeb House, Harvard and publish the Government AIWS Ethics and Practices Index. This is the focused work which belongs to the AIWS Initiative developed by the Michael Dukakis Institute in cooperation with AI World and influential researchers in the field.

On this event, the Michael Dukakis Institute hope to propose to global government leaders, but first and foremost, to heads of G7, OECD countries and countries with a population of over 80 million – the pioneers in the industrial revolution we are currently embarking on. We hope that government leaders from G7 & OECD countries would consider apply the Government AIWS Ethics Index and in the near future, the index will contribute to the global consensus in AI development.

We also hope to make contribution to the notion of dealing with these AI international problems through the United Nation. It is the United Nations, who plays a key role in regulating the actions of governments as well as people towards the aim of maintaining international peace & security and promoting co-operation between countries.

08

AIWS Model
The Next Generation Democracy
(AIWS-G7 Summit Initiative, April 2019)

BOSTON GLOBAL FORUM